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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/957,008	09/20/2001	Michael Ray Timperman	2001-0134.02	3800

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EXAMINER

PARK, JUNG H

ART UNIT PAPER NUMBER

2661

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/957,008		TIMPERMAN ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Jung Park		2661	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____   | 6) <input type="checkbox"/> Other: ____                                     |

**DETAILED ACTION**

1. Claims 1-30 are pending for the examination.

***Specification***

2. The disclosure is objected to because of the following informalities: The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5-15, 19-25 and 28-30 are rejected under 35 U.S.C 102(b) as being anticipated by Harriman et al. (U.S. 5,898,687, "Harriman").

Regarding claim 1, Harriman teaches a method of processing data packets, comprising:  
receiving a plurality of the data packets at a selected node (102 figure 1; col. 3, lines 54-56; col. 4, lines 7-9);  
extracting pertinent information (*header* figure 1; col. 4, lines 7-8; col. 4, lines 35-37) from the data packets, the pertinent information being pertinent to the selected node; and  
generating a plurality of response data packets (116 figure 1; col. 3, lines 54-56; col. 4, lines 10-12; col. 7, lines 59-62); based on the pertinent information (*header* figure 1; col. 7, lines 59-64),

wherein the extracting and generating steps are performed without use of a microprocessor (114 and 116 figure 1; col. 4, lines 7-12). Although Harriman does not explain in detail the steps without use of a microprocessor, it is inherent that the convention extraction circuit coupled with shared memory (114 figure 1) does not use a microprocessor because the extracted payload data from the cell packet is simply stored in the shared memory (col. 4, lines 35-36). It is a simple circuit to separate the header and the payload of the cell and then send out them through different output circuits. The generating step processed in the assembler (116 figure 1) is also same as the conventional extractor. The conventional assemble circuit assembles the separated bytes in order to make a packet cell.

Regarding claims 2, 13 and 23, the extracting and generating steps are performed without use of a storage memory (114 and 116, figure 1; col. 4, lines 7-8; col. 4, lines 35-37). Although Harriman does not explain in detail the steps without use of a storage memory, it is inherent that the convention extraction circuit coupled with shared memory does not use a storage memory. The same reason described in the above is applied to these claims.

Regarding claims 3 and 8, the selected node includes a peripheral device, the pertinent information being pertinent to the peripheral device (106 and 107, figure 1).

Regarding claims 5, 15, 24 and 25, the further step of transmitting the response data packets to a packetized data network (104 figure 1).

Regarding claim 6, the receiving step includes receiving the data packets from a packetized data network (102 figure 1).

Regarding claim 7, the pertinent information includes a packet payload (115 figure 1).

Regarding claim 9, the extracting step includes extracting header information (114 figure 1).

Regarding claim 10, the response data packets include the header information (116 figure 1).

Regarding claims 11 and 21, they are claims corresponding to claim 1 and are therefore rejected for the similar reasons set forth in the rejection of claim 1.

Regarding claims 12, 14 and 22, they are claims corresponding to claim 1 and are therefore rejected for the similar reasons set forth in the rejection of claim 1.

Regarding claims 19 and 28, the filter device is configured to receive the data packets from a packetized data network (102 and 114 figure 1).

Regarding claim 20, an interface interconnecting the peripheral device and the filter device (112 figure 1).

Regarding claim 29, Harriman is silent on the packet generator comprising an N to M decoder. However, the decoder is a hardware device or software that converts coded data back into its original form. Therefore, it is inherent that the assembler (116 figure 1) can be a hardware that converts N inputs to M output, or an N to N decoder.

Regarding claim 30, the pertinent information comprises selected bytes within the data packets (*header* 114 figure 1).

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill

in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, 16-18, 26 and 27 are rejected under 35 U.S.C 103(a) as being unpatentable over Harriman in view of Krishnan et al. (U.S. Pub. No., 2003/0007489, "Krishnan").

Regarding claims 4, 16-18, 26 and 27, Harriman is silent on the protocol state machine configured for receiving the signal from the filter device and issuing a request to the packet generator to transmit the response data packets. However, Krishnan teaches the extraction unit comprising a state machine (424 figure 5, col. 5, para. 47). Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include the feature in Krishnan with Harriman because one would be motivated to utilize the computing device (state machine) designed with the operational states in order to provide faster performance at lower cost than a general purpose CPU.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- U.S. Patent (6,876,653) to Ambe et al. show about a method of filtering data packets in a network device.
  - U.S. Patent (6,700,888) to Jonsson et al. show the method of manipulating header fields for improved performance in packet communications.
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung Park whose telephone number is 571-272-8565. The examiner can normally be reached on Mon-Fri during 7:15-4:45.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JP  
Jung Park  
Patent Examiner  
Art Unit 2661

JP  
July 11, 2005

*Chau T. Nguyen*

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